

CLAIM AMENDMENTS

Please change "Patent Claims" to -- We claim: -- .

1 1. (Currently Amended) A method and ~~apparatus for the~~
2 steam misting of rectangular nozzles and spinning systems equipped
3 therewith for producing polyamide filaments, especially ~~in accordance~~
4 ~~with the bottom leading concept, characterized in that, the~~
5 comprising the steps of:

6 feeding steam required for the steam misting initially
7 ~~flows~~ through a tube loop lying in ~~the carrier steam~~ a heating
8 portion of the a spinning beam in order to heat it the steam
9 approximately to the same temperature as the a spinning tempera-
10 ture;

11 itself, then passing the steam being then passed through
12 a pressure equalizing distribution chamber (14) ~~before it and~~ then
13 directly emerges on the emitting the steam along an entire longi-
14 tudinal side of a rectangular nozzle stack; (2) and

15 finally is directed the steam in a uniformly distributed
16 manner in the a spinning chamber (8) below said spinning beam to
17 the a spinning plate thereof.

1 2. (Currently Amended) The method and apparatus accord-
2 ing to defined in claim 1 characterized in that wherein the pres-
3 sure equalizing distribution chamber (14) is arranged respectively
4 along a single longitudinal side of each said rectangular nozzle
5 stack and is configured in a labyrinth shape and is fed only by a
6 single steam inlet (19) from the tube loop (9) centrally.

1 3. (Currently Amended) The method and apparatus accord-
2 ing to claim 1 characterized in that the defined in claim 2
3 wherein said pressure equalizing and labyrinth like distribution
4 chambers are respectively provided on both longitudinal sides of
5 the rectangular nozzle stack.

1 4. (Currently Amended) The method and apparatus accord-
2 ing to claim 1 characterized in that defined in claim 2 wherein
3 the pressure equalizing and labyrinth like distribution chambers
4 chamber which have has a single centrally oriented steam inlets
5 (14) in their simplest form each are inlet is comprised of at least
6 two passages (15, 16) with rectangular cross sections, which are
7 open on their longitudinal sides and transition between one another
8 at right angles, whereby the a first of said passages passage
9 (15) has two to a maximum of five times greater rectangular cross
10 sections section than the subsequent a second of said passage (16)
11 passages.

1 5. (Currently Amended) The method and apparatus accord-
2 ing to claim 1 characterized in that defined in claim 2 wherein the
3 pressure equalizing and labyrinth-like distribution chamber (14)
4 which has a single central and horizontally oriented steam inlet
5 (19) have in their simplest form each has at least two passages
6 (15, 16) with rectangular cross sections which are open at their
7 longitudinal sides and transition between them at right angles,
8 whereby the a first and of said passages is larger passage (15)
9 and has an upwardly open rectangular cross section which runs into
10 the a right angled horizontal and very small gap of the subsequent
11 a second of said passage passages (16) which then opens with one
12 ef its longitudinal sides into the spinning chamber and through
13 which the steam is uniformly distributed transversely to the a
14 filament curtain in the direction of the nozzle stack.

1 6. (Currently Amended) An apparatus for the steam
2 misting of a rectangular nozzles nozzle and a spinning systems
3 equipped therewith characterized in that the comprising a pressure
4 equalized and labyrinth-like distribution chambers (14) each of
5 which has having a single steam inlet, has a steam outlet bar (11)
6 which in its simplest form is comprised of at least two bars
7 attached together by screws (12, 13) whereby the a respective base
8 part (12) with the central steam inlet (19) is fixed between the a
9 spinning beam (1) and the an after-heater (4), and that the a
10 distributor part (13) is also so connected by screws to the base
11 part (12) that it can be removed for cleaning.

1 7. (Currently Amended) The apparatus according to ~~charac-~~
2 ~~terized in that wherein~~ the pressure equalizing and labyrinth-
3 shaped distribution chamber ~~(14)~~—which follows ~~a~~ the single steam
4 inlet ~~(19)~~—is configured as a simple steam equalizing labyrinth
5 ~~(14)~~—which is formed first by the fixed and smooth walls of the
6 base bar, ~~(12)~~ second by ~~the~~ a fixed and smooth underside of the
7 spinning beam ~~(1)~~, and third and fourth by the cutouts ~~(15, 16)~~—in
8 the ~~mounted~~ distributor bar ~~(13)~~.

1 8. (New) An apparatus for steam misting a spun curtain
2 of filaments which comprises:

3 a spinning beam having rectangular nozzles from which a
4 curtain of filaments issues into a spinning chamber below said
5 nozzles, said nozzles being flanked by a pair of heating chambers;

6 a piping loop in one of said chambers for supplying
7 superheated steam brought to a spinning temperature by passage of
8 the steam through said loop;

9 an elongated steam distributor extending longitudinally
10 along a longitudinal side of said spinning chamber below said
11 nozzles and opening into said spinning chamber through a narrow
12 slot; and

13 a steam outlet bar defining with said elongated steam
14 distributor a distribution chamber wider than said slot and commu-
15 nicating with said slot along the length thereof, said steam outlet
16 bar having a single opening centrally of said outlet bar and said

17 steam distributor and receiving steam from said loop and discharg-
18 ing steam into said distribution